REMARKS

STATUS OF THE CLAIMS

Claims 36-56 are pending in the application. Claims 36-56 stand rejected. Claims 1-35 have been previously canceled without prejudice or disclaimer of the subject matter disclosed therein. Claim 36 has been amended to further define the relationship of manganese, zinc, titanium, and 'others.' Support for these amendments are to be found, at least, in the table between paragraphs 26 and 27. More particularly, each of manganese, zinc, titanium, and 'others' has been amended to recite the high, stated value described in the table between paragraphs 26 and 27. In addition, 'others' has been amended to include lead as described in paragraph 27.

REJECTION UNDER 35 U.S.C. §112

Claims 36-56 stand rejected under 35 U.S.C. §112, first paragraph, for failing to comply with the written description requirement. Specifically, in the Office Action dated August 27, 2004 (the Office Action), it is alleged that the disclosure lacks support for the range of, "0.01 to 0.15 percent one or more other elements" in light of a recited, "others 0-0.15." Claim 36 has been amended to recite *inter alia*, 0.5 percent manganese by weight; 0.35 to 0.65 percent magnesium by weight; 1.0 percent zinc by weight; 0.2 percent titanium by weight; 2.0 to 2.5 percent copper by weight; 0.15 percent one or more other elements, wherein the one or more other elements includes lead. In particular, as each of: 0.5 percent manganese by weight; 1.0 percent zinc by weight; 0.2 percent titanium by weight; and 0.15 percent one or more other elements are described in the table between paragraphs 26 and 27 and the inclusion of lead as

one of the one or more other elements is described in paragraph 27, the Applicant believes the rejection under 35 U.S.C. §112, first paragraph, has been obviated and allowance of the claims 36-56 is earnestly sought.

REJECTION UNDER 35 U.S.C. § 103 (U.S. Patent No. 5,879,478 in view of U.S. Patent No. 4,973,363)

Claims 36-52, 54, and 56 are rejected under 35 U.S.C. § 103(a) as being anticipated by U.S. Patent No. 5,879,478 to Willem Loue et al. (the Loue document) in view of U.S. Patent No. 4,973,363 to Ikeda Hayato et al. (the Hayato document). Firstly, the Examiner is thanked for her indication that the subject matter of claims 53 and 55 is allowable over the cited references assuming the rejection under 35 U.S.C. §112, first paragraph is overcome. As the Applicant believes the rejection under 35 U.S.C. §112, first paragraph has been overcome in light of the amendments made herein and further as the subject matter of claim 53 has been incorporated into claim 36, the Applicant believes that the rejection under 35 U.S.C. § 103(a) as being anticipated by the Loue document in view of the Hayato document has been obviated. Claims 37-52, 54 and 56 depend from independent claim 36. Therefore, withdrawal of the rejection of claims 36-52, 54, and 56 under 35 U.S.C. § 103(a) as being anticipated by the Loue document in view of the Hayato document is earnestly solicited at least in light of the amendments herein and following reasons.

In order to establish a *prima facie* case of obviousness, the Examiner is kindly reminded that each of three basic criteria must be met. First, the prior art references must teach or suggest all of the elements of the claimed invention. MPEP § 2142; MPEP § 2143.03. Second, there must be a reasonable expectation of success suggested in the prior art. MPEP § 2142. Third, there must be some motivation, either in the references themselves or in the knowledge generally

available to one of ordinary skill in the art at the time the invention was conceived, to modify and/or combine the reference teachings. *Id.*

Claims 37-52, 54, and 56 depend from independent claim 36. A *prima facie* case of obviousness has not been made in that the Loue document and the Hayato document considered independently and combined fail to teach or suggest the invention as recited in claim 36 of the present application.

The invention as set forth in claim 36 recites *inter alia*, injecting the semi-solid metal into a die cavity, wherein the metal is an aluminum alloy includes: 6.5 to 8.5 percent silicon by weight; 0.6 to 1.0 percent iron by weight; 0.5 percent manganese by weight; 0.35 to 0.65 percent magnesium by weight; 1.0 percent zinc by weight; 0.2 percent titanium by weight; 2.0 to 2.5 percent copper by weight; 0.15 percent one or more other elements, wherein the one or more other elements includes lead; and aluminum as the remainder. (emphasis added)

In contrast, the Loue document discloses an aluminum alloy with the composition (by weight): Si 5%-7.2%; Cu: 1%-5%; Mg<1%; Zn<3%; Fe<1.5%; other elements<1% each and<3% in total, with % Si<7.5-% Cu/3. (See Abstract.) Also disclosed in the Loue document is the inclusion of up to 0.2% titanium and/or up to 0.1% boron. (See Column 3 Ln 17-19) The Hayato document fails to make up for the deficiencies of the Loue document. In this regard, the Hayato document does not disclose or suggest lead for use with aluminum alloys. As such, a *prima facie* case of obviousness has not been established in that both the Loue document and the Hayato document, considered separately and combined, fail to teach or suggest the invention as recited in claim 36 of the present application.

Absent the disclosure or suggestion of all of the claimed elements, the Loue document and the Hayato document fail to provide a reasonable expectation of success and further fails to

provide some motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art at the time the invention was conceived, to modify and/or combine the reference teachings. Therefore, on all counts, the Office Action has failed to establish a *prima facie* case of obviousness. If an Examiner fails to establish a *prima facie* case, the rejection is improper and will be overturned. See *In re Rijckaert*, 9 F.3d 1531 (Fed. Cir. 1993). The Federal Circuit further held in the matter of *In re Oetiker*, 977 F.2d 1443, 1445-1446 (Fed. Cir. 1992):

> If examination ... does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to the grant of the patent.

In view of the foregoing, withdrawal of the 35 U.S.C. § 103(a) rejection to claim 36 as being anticipated by the Loue document in light of the Hayato document is respectfully requested at least because both the Loue document and the Hayato document fail to disclose, at least, "0.15 percent one or more other elements, wherein the one or more other elements includes lead" as recited, *inter alia*, in claim 36. Claims 37-52, 54, and 56 depend from independent claim 36 and are therefore believed to be patentable for at least the same reasons as stated herein with respect to claim 36. Thus, the Applicant respectfully requests the Examiner to reconsider and withdraw the rejections of claims 36-52, 54, and 56.

ALLOWABLE SUBJECT MATTER

The Examiner is kindly thanked for her indication that claims 53 and 55 are allowable over the prior art assuming the rejection under 35 U.S.C. §112, first paragraph, is resolved. As the Applicant believes this to be the case, allowance of the claims 53 and 55 is earnestly sought.

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PATENT

CONCLUSION

In view of the foregoing remarks, the Applicant submits that the application is now in condition for allowance. If the Examiner believes that the application is not in condition for allowance, the Applicant respectfully requests that the Examiner contact the undersigned by telephone if it is believed that such contact will expedite the prosecution of the application.

In the event this paper is not time filed, the Applicant petitions for an appropriate extension of time. Please charge any fee deficiencies or credit any overpayments to Deposit Account No. 50-2036.

Respectfully submitted,

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